THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 25

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte ALLAN R. HASS
and JOSEPH M. DYNYS

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Appeal No. 96-3737
Application 08/203,840[1]

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ON BRIEF

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Before DOWNEY, GARRIS, and OWENS, Administrative Patent Judges.

GARRIS, Administrative Patent Judge.

DECISION ON APPEAL

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[1] Application for patent filed February 28, 1994. According to appellants, this application is a continuation of Application 07/897,791, filed June 12, 1992.

This is a decision on an appeal from the final rejection of claims 1 through 18 and 37 through 42 which are all of the claims remaining in the application.

The subject matter on appeal relates to a method of fabricating a multilayer structure from a stack of layers formed from ceramic material, wherein the stack of layers forms at least one recess, comprising the steps of (a) positioning a block of resilient, compliant material on or over said at least one recess and (b) applying sufficient pressure to the resilient, compliant material to cause it to deform and fill said at least one recess and cause interlayer adhesion of said layers. This appealed subject matter is adequately illustrated by independent claim 1 which reads as follows:

1. A method of fabricating a multilayer structure from a stack of layers formed from ceramic material, said stack of layers does not contain adhesive between each layer and forms at least one recess, said at least one said recess having a depth and an area, said method comprising the step [sic, steps] of:

(a) positioning a block of resilient, compliant material on or over at least one stack of layers including said area of said at least one recess, said block of resilient, compliant material having a thickness greater than said depth of said at least one recess; and

(b) applying sufficient pressure to said resilient, compliant material to cause said resilient, compliant material to deform and fill said at least one recess and cause interlayer adhesion of said layers.

The references relied upon by the examiner in the rejections before us are:

McNeal et al. (McNeal)	4,680,075	Jul. 14, 1987
Bloechle et al. (Bloechle)	4,737,208	Apr. 12, 1988
Takeguchi et al. (Takeguchi)	5,116,440	May 26, 1992

Claims 1, 5 and 7 through 9 stand rejected under 35 U.S.C. § 102(b) as being anticipated by McNeal.

Claims 1 through 3, 5, 7 through 11, 13, 14, 16 and 18 stand rejected under 35 U.S.C. § 103 as being obvious over McNeal; claims 4 and 17 stand correspondingly rejected over McNeal and further in view of Bloechle; and claims 37 through 40 stand similarly rejected over McNeal in view of Takeguchi.[2]

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[2] Apparently by oversight, the examiner has failed to include claims 6, 12, 15, 41 and 42 in any of the rejections advanced on this appeal. Although claims 41 and 42 were rejected over the here applied prior art in the final office action, claims 6, 12 and 15 have never been specifically rejected or otherwise treated by the examiner during prosecution of this application. These failures by the

We refer to the supplemental brief filed February 20, 1996 and to the answer mailed May 9, 1996 for a complete exposition of the opposing viewpoints expressed by the appellants and the examiner concerning the above noted rejections.

OPINION

For the reasons which follow, we will not sustain any of these rejections.

It is the appellants' basic contention that the McNeal patent, while generally directed to a method of fabricating a multilayer structure from a stack of layers, contains no teaching or suggestion concerning the steps required by all appealed claims of positioning a block of resilient, compliant material on or over a stack recess and applying sufficient pressure to cause the resilient, compliant material to deform and fill the recess. We agree.

Regarding the use of a block of resilient, compliant material, the examiner presents the following position in the paragraph bridging pages 6 and 7 of the answer:

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examiner are harmless in light of our disposition of the subject appeal.

> McNeal et al. clearly discloses a block of material (22) in Figure 2 that has a thickness greater than the depth of the recess. Further, McNeal et al. clearly states at col. 6, line 66, that rubber may be used. Rubber is a resilient, compliant material.

As for the claim requirement that the material deform and fill the recess, the examiner urges that, "although the plug [of McNeal] has the shape of the cavity[,] it could be said to deform when pressure is applied" and, in any event, that "one of the

other embodiments in McNeal et al. as illustrated in Figures 2 and 3 clearly shows that the plug is deformed to fill the shape of the recess" (answer, page 7).

The examiner's aforequoted rationale is faulty in a number of respects. First, although figures 2 and 3 of McNeal may show a "block" 22 of material which deforms and fills a recess, these figures do not illustrate a fabricating method having positioning and applying steps of the type here claimed as the examiner believes. Instead, figures 2 and 3 show the steps for transforming thermoplastic layer 22 into a shaped plug 30 via a structure including "dummy" layers which simulate the multilayer structure and recess to be subsequently fabricated (e.g., see lines 27 through 63 in

column 3). Thus, the examiner has made a clearly erroneous finding of fact in contending that figures 2 and 3 of McNeal show the use of a block of material which deforms and fills a recess during a method of fabricating a multilayer structure in accordance with the appealed claims.

Additionally, we do not consider as well taken the examiner's position that the use of a "resilient, compliant material" in accordance with the independent claim on appeal is satisfied by McNeal's disclosure of a plug fabricated from rubber based on the aforequoted proposition that "[r]ubber is a resilient, compliant material". In this regard, it is axiomatic that claim language should be read in light of the specification. In re Sneed, 710 F.2d 1544, 1548, 218 USPQ 385, 388 (Fed. Cir. 1983). Thus, in the case at bar, it must be determined whether rubber is a resilient, compliant material within the meaning of the appealed claims when read in light of the specification disclosure (e.g., see the paragraph bridging pages 7 and 8 and the first full paragraph on page 8 of the subject specification). This determination involves consideration of several factors including whether the rubber is vulcanized (and to what extent) or unvulcanized

(e.g., see the definitions on pages 1016-1018 of Hawley's Condensed Chemical Dictionary, 11th ed.; copy attached). The examiner points to nothing which evinces that McNeal teaches or would have suggested a rubber plug which is resilient and compliant in the manner required by the appellants' claims. On the other hand, McNeal's parent independent claim 6 ("a snugly fitting thermoplastic plug") in combination with dependent claim 9 ("said plug is a rubber plug") discloses a thermoplastic rubber plug which militates against the examiner's belief that patentee's rubber plug would be resilient as claimed by the appellants.

These deficiencies of the McNeal reference are not cured by either of the secondary references applied by the examiner and

are fatal to each of the rejections advanced on this appeal. For this reason alone, we cannot sustain any of the examiner's above noted rejections.

The decision of the examiner is reversed.

REVERSED

Mary F. Downey Administrative Patent Judge	)	
Bradley R. Garris Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
Terry J. Owens Administrative Patent Judge	)	

tdc

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